

ABSTRACT OF THE DISCLOSURE

A first free magnetic layer, a second free magnetic layer, a lower pinned magnetic layer, and an upper pinned 5 magnetic layer are formed of magnetic materials whose β values are suitably set so that the resistances for up-spin conduction electrons of all the magnetic layers become lower than those for down-spin conduction electrons when the magnetization of a free magnetic layer is changed to exhibit 10 a lowest resistance. The magnetic detecting element exhibits an increased change in resistance per area.